

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

#### NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Eurotech Industries, Inc. 4201 NE 12<sup>th</sup> Terrace Ft. Lauderdale, FL 33334

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "4500 Dry-Glazed, Tilt-Turn" White PVC Dual Action Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. 4500TTD001 R2, titled "4500-Series Tilt-Turn Window - Large Missile Impact Resistant", sheets 1 through 6 of 6, dated 11/05/12, with revision #2 dated 11/06/13, prepared by Category 5 Engineering Services, Inc., signed and sealed by Emma T. Mellinger, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

#### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

(MIAMI-DADE COUNTY) | APPROVED 1/19/14

NOA No. 13-0227.02 Expiration Date: January 16, 2019 Approval Date: January 16, 2014

Page 1

#### Eurotech Industries, Inc.

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. **4500TTD001 R2**, titled "4500-Series Tilt-Turn Window Large Missile Impact Resistant" sheets 1 through 6 of 6, dated 11/05/12, with revision #2 dated 11/06/13, prepared by Category 5 Engineering Services, Inc., signed and sealed by Emma T. Mellinger, P.E.

#### B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a Rehau's series 4500 white PVC tilt-turn window, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3741-1**, dated 04/28/11, signed and sealed by Gerard J. Ferrara, P.E.

- 2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94

along with marked-up drawings and installation diagram of a Rehau's series 4500 white PVC tilt-turn window, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3741-1A**, dated 04/28/11, signed and sealed by Gerard J. Ferrara, P.E.

#### C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis complying with **FBC-2010**, dated 11/03/12, prepared by Category 5 Engineering Services, Inc., signed and sealed by Emma T. Mellinger, P.E.
- Glazing complies with ASTM E1300-04

#### D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

Manuel Perez, P.E. Product Control Examiner NOA No. 13-0227.02

Expiration Date: January 16, 2019 Approval Date: January 16, 2014

#### Eurotech Industries, Inc.

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 11–0624.02 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont SentryGlas® Interlayer" dated 08/25/11, expiring on 01/14/17.
- 2. Notice of Acceptance No. 11-0601.06, issued to REHAU Industries, Inc., for their White Rigid PVC Exterior Extrusions, approved on 08/11/11, expiring on 06/17/14.
- 3. Test report No. **B1348.01-106-31**, prepared by Architectural Testing, Inc., dated 08/02/11, issued to REHAU Construction LLC, for their **Glazing Stop** Part No. **560600** and **Glazing Spline** Part No. **864952**, both EPDM exterior glazing gaskets evaluated per the following standards:
  - a) ASTM D 2240 Hardness (Unaged).
  - b) ASTM D 395 Compression Set.
  - c) ASTM D 1149 Ozone Resistance.
  - d) ASTM D 412 Tension Properties of Rubber and Thermoplastic Elastomers.
  - e) ASTM D 573 Heat Aging.
  - f) ASTM D 624 Tear Strength.
  - g) ASTM D 746 Brittleness.
  - h) ASTM D 925 Non Staining.
  - i) ASTM C 1166 Flame Propagation.

#### F. STATEMENTS

- 1. Statement letter of conformance, complying with **FBC-2010**, dated November 13, 2012, issued by Category 5 Engineering Services, Inc., signed and sealed by Emma T. Mellinger, P.E.
- 2. Statement letter of no financial interest, dated November 13, 2012, issued by Category 5 Engineering Services, Inc., signed and sealed by Emma T. Mellinger, P.E.
- 3. Laboratory code compliance statement, dated 04/28/11, issued by National Certified Testing Laboratories for Test Report No. NCTL-210-3741-1, signed and sealed by Gerard J. Ferrara, P.E.
- 4. Manufacturer's Acknowledgement Letter issued by Eurotech Industries, Inc., dated 11/06/13, signed by Angelo Petreccia, President Eurotech Industries.
- 5. Association Release Letter for Master File #13-0076 issued by AAMA, dated 12/18/13 and signed by Brad Schultz, Associated Laboratories, Inc. AAMA Administrator/Validator.

#### G. OTHER

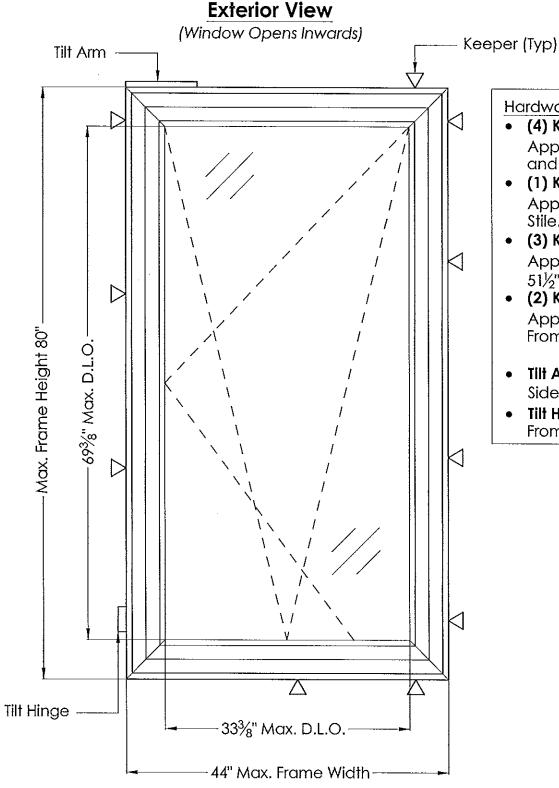
1. None.

Manuel Perez, P.E. Product Control Examiner

NOA No. 13-0227.02

Expiration Date: January 16, 2019 Approval Date: January 16, 2014

## 4500-SERIES TILT-TURN WINDOW (Dry Glazed)



Hardware Locations, as Tested:

- (4) Keepers at Lock Stile, Approximately 4½", 23½", 50", and 72" From Head.
- (1) Keeper at Head,
  Approximately 4½" From Lock
  Stile.
- (3) Keepers at Hinge Stile, Approximately 4½", 20½" and 51½" From Head.
- (2) Keeper at Sill, Approximately 4½" and 20½" From Frame Edge.
- Tilt Arm at Head (Hinge Stile Side)
- **Tilt Hinge** at Hinge Stile, 4½" From Sill

DESIGN PRESSURE RATING	MISSILE IMPACT RATING  Large Missile Impact	
+65 psf, -65 psf		

#### **NOTES**

This Product is a Vinyl Tilt-Turn Window with Steel Reinforcement, Dry-Glazed with Laminated Insulated Glazing.

Vinyl Material Meets the Requirements of the 2010 Florida Building Code (HVHZ), and has a Current Miami-Dade County NOA.

This Product Has Been Designed and Manufactured to Comply with the Requirements of the 2010 Florida Building Code, including the High Velocity Hurricane Zone (HVHZ).

This Approval Applies to Single Units, or Combinations of Units Installed Either Side of Product-Approved Mullions Meeting the Site-Specific Design Pressure Requirements.

Wood Buck Design by Others: Wood Bucks Shall Adequately Transfer Imposed Loads to the Surrounding Structure.

A Load Duration Increase in Allowable Stress Has Been Used in the Design of Anchors into Wood Only.

Anchors Shall be As Listed, As Shown on Details Herein. Anchor Embedment into Base Substrate Shall be Beyond Wall Dressing or Stucco.

Anchor Conditions Not Described Herein are Not Part of This Approval Document, and Shall Require a Site Specific Design Signed and Sealed by A Florida-Registered Professional Engineer.

#### TABLE OF CONTENTS

#### SHEET DESCRIPTION

- 1 Elevation and General Notes
- 2 Anchor Schedule and Installation Notes
- 3 Anchor Details
- 4 Cross Sections and Glazing Detail
- 5 Components and Bill of Materials

Engineering Services, Inc. 5

Engineering Services, Inc. 5

1600 S. Federal Highway. #207

Pompano Beach, FL 33062
(954) 784-6991 • CA #25854

Approved as complying with the Florida Duiding Code

Bate Jan. 6. 2014

NOA# 13. 0227.02

Mlami Dade Product Control

By Manual Dade

4500-SERIES TILT-TURN WINDOW Large Missile Impact Resistant

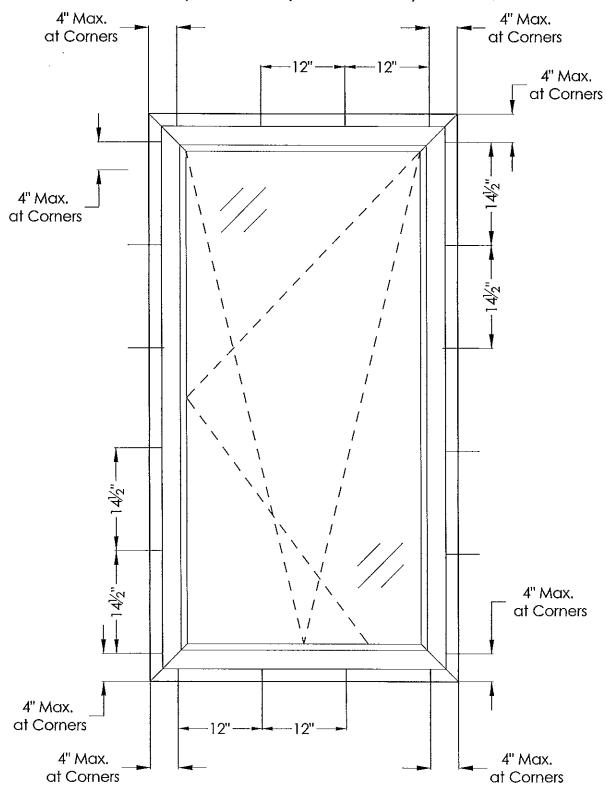
**EUROTECH INDUSTRIES, INC.**3 NE 32nd Street, Fort Lauderdale, FL 33334 (954) 630-9967 tel. (954) 630-0217 fax.

**DRAWING No.:** 4500TTD001 R2

Sheet 1 of 6

#### 4500-SERIES TILT-TURN WINDOW (Dry Glazed) Interior View

(Window Opens Inwards)



#### **INSTALLATION NOTES**

- Anchors Shall be of a Type Listed on This Sheet, Depending on the Substrate.
- Manufacturer's Vinyl Block Shall be Secured with Caulking at Each Anchor Location So That the Fastener Penetrates the Block, and No Portion of the Fastener is Exposed or Unsupported.
- Anchors Shall be Located a Maximum of 4" From Corners.
- The Balance of Anchors at the Head and Sill Shall be Spaced at a Maximum of 12" o/c. The Balance of Anchors at Side Jambs Shall be Spaced a Maximum of 14 1/2" o/c.
- Wood Bucks Shall Fully Back the Window Frame, Supporting its Entire Depth.
- A 1" x Wood Buck Shall be a Wood Buck Having a Thickness of Less Than 1½". 1"x Wood Bucks Shall be Optional if the Window Can be installed Directly to the Substrate.
- The Installation of 2" x as well as 1" x Wood Bucks Shall be Engineered by Others, as Approved by the Authority Having Jurisdiction.
- A Structural Shim Shall be Used at Each Anchor Location Where a Gap of 1/8-inch or More Exists Between the Window Frame and the Substrate. Such Shims Shall Extend the Entire Depth of the Frame, and be No More than 1/4-inch in Thickness, Unless

Otherwise Specified.

 Anchor Embedments and Edge Distances Indicated Shall be Beyond Wall Dressing or Stucco, into Structural Substrate.

### ANCHORS SHALL BE OF THE FOLLOWING

- TYPE I: For Installation into Concrete Substrates (fc min. = 2730 psi), Use Approved 1/4" ELCO Ultracons of Sufficient Length to Achieve at Least  $1\frac{3}{4}$ " Embedment.
- TYPE II: For installation into CMU Substrates (Hollow or Grout-Filled; fc min. = 1924 psi), Use Approved  $\frac{1}{4}$ " **ELCO Ultracons of Sufficient Lenath** to Achieve at Least  $1\frac{1}{4}$ " Embedment.
- TYPE III: For Installation into Wood Substrates, Use #12 Self-Drilling Screws (Hilti Kwik-Flex), of Sufficient Length to Achieve at Least 1 1/3" Embedment.
- TYPE IV: For Installation into Metal **Substrates**, at Least  $\frac{1}{8}$ " Thick, Use #12 Self-Drilling Screws (Hilti Kwik-Flex), of Sufficient Length to Achieve a Minimum Penetration through the Metal of Three Full Thread Pitches. No Shim Space is Permitted.

Approved as complying with the Florida Building Code
5 Date 2014
8 NOA# 13-02/1-02
9 Miami Dade Product Control E By Malliel

CATEGORY Engineering Services, Inc.

**EUROTECH INDUSTRIES, INC.** 250 NE 32nd Street, Fort Lauderdale, FL 33334 (954) 630-9967 tel. (954) 630-0217 fax.

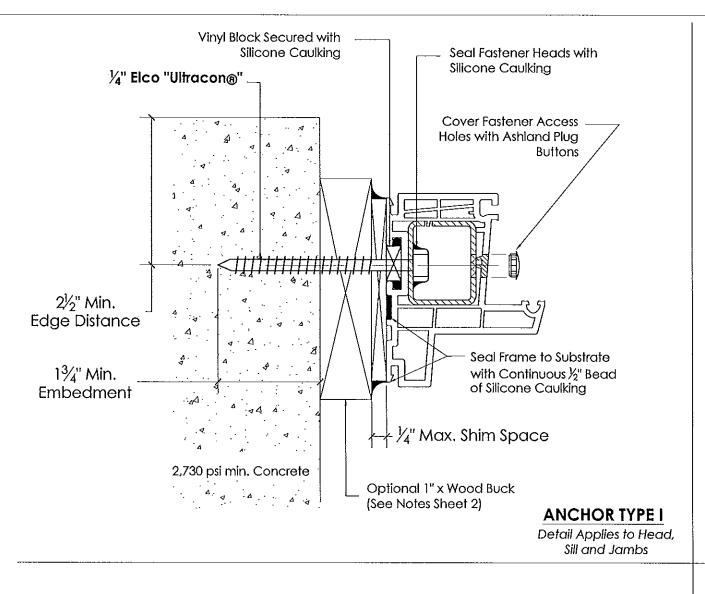
4500-SERIES TILT-TURN WINDOW Large Missile Impact Resistant Large Missile Impact

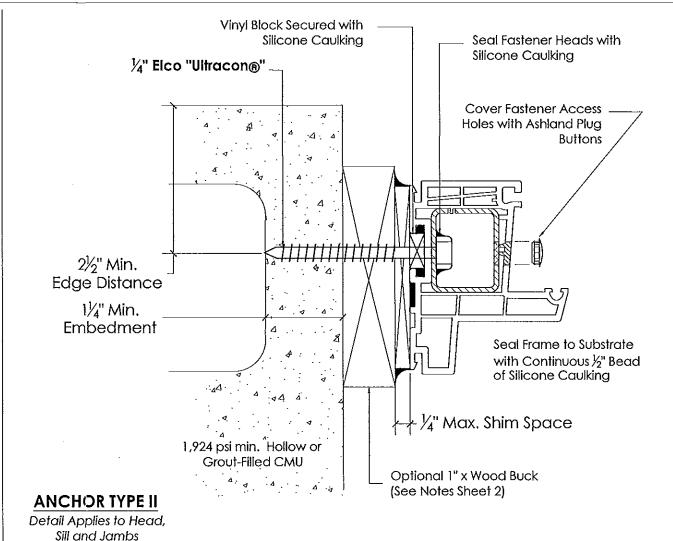
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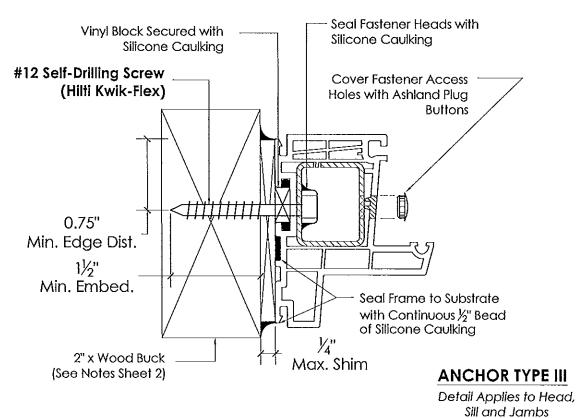
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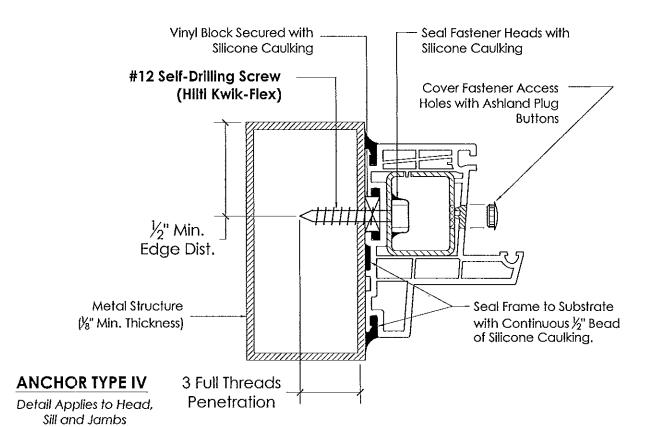
4500TTD001 R2

Sheet 2 of 6









Midmi-Dade County Use Only

CATEGORY

Engineering Services, Inc.

1600 S. Federal Highway. #2

Pompano Beach, Fl. 33062

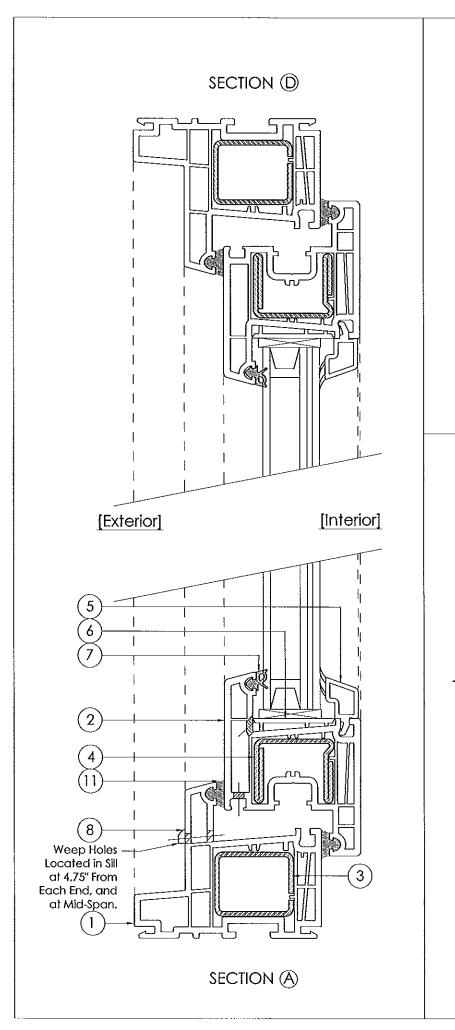
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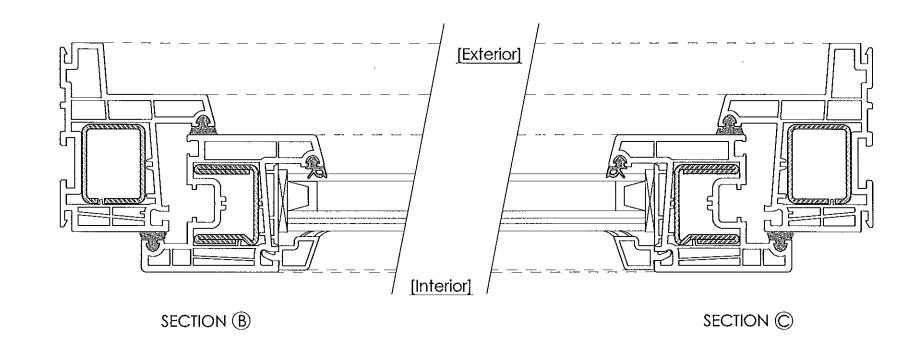
4500-SERIES TILT-TURN WINDOW Large Missile Impact Resistant

**EUROTECH INDUSTRIES, INC.** 250 NE 32nd Street, Fort Lauderdale, FL 33334 (954) 630-9967 tel. (954) 630-0217 fax.

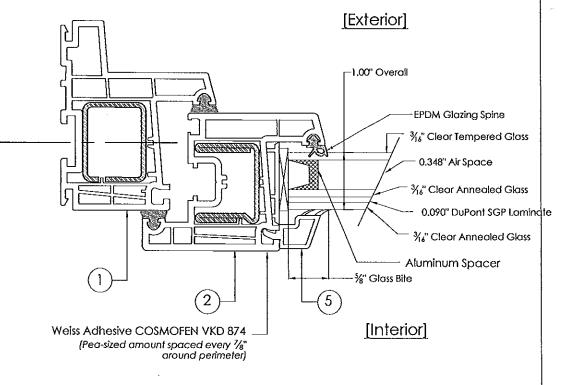
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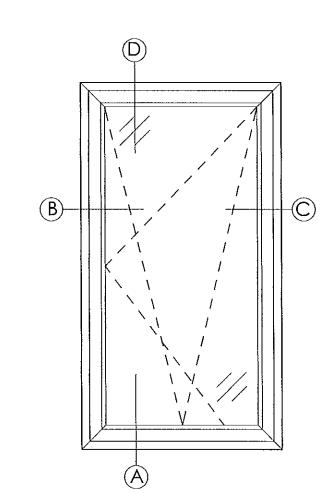
Sheet 3 of 6











## 4500-SERIES TILT-TURN WINDOW Large Missile Impact Resistant

CATEGORY 5
Engineering Services, Inc. 5

Approved as complying with the Florida Building Code
Date Jaya, Carla NOAH And Control
Miami Dade Product Control

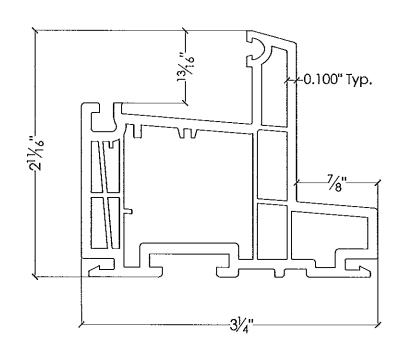
EUROTECH INDUSTRIES, INC.

250 NE 32nd Street, Fort Lauderdale, FL 33334

(954) 630-9967 tel. (954) 630-0217 fax.

**DRAWING No.:** 4500TTD001 R2

Sheet 4 of 6



#### **BILL OF MATERIALS**

ltem#	Part #	Description	Material	Vendor
1	601205	Frame	Vinyl	Rehau Industries, Inc.
2	554051	Sash	Vinyl	Rehau Industries, Inc.
3	237091	Reinforcement - Frame	Galv. Steel	Rehau Industries, Inc.
4	244536	Reinforcement - Sash	Galv. Steel	Rehau Industries, Inc.
5	560600	Glazing Stop	Vinyl	Rehau Industries, Inc.
6	268651	Shim Support	Vinyl	Rehau Industries, Inc.
7	864992	Glazing Spline	EPDM	Rehau Construction, LLC
8	261528	Drain Cover Caps	Vinyl	Rehau Industries, Inc.
9	-	Roto T&T Harware	Steel	Roto
10	13586	Plug Buttons	Vinyl	Ashland
1	864952	Sealing Spline	EPDM	Rehau Construction, LLC

# CATEGORY 5 Engineering Services, Inc. 5

Approved as complying with the Florida Building Code
Date Jan 16 2014
NOAN 3-022 Control
Miami Dade Product Control

4500-SERIES TILT-TURN WINDOW Large Missile Impact Resistant

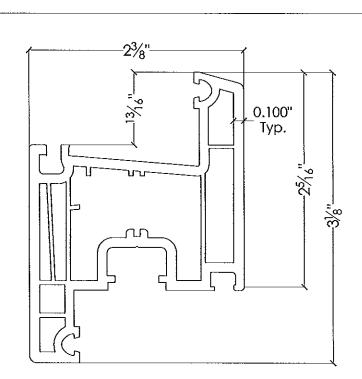
**EUROTECH INDUSTRIES, INC.** 250 NE 32nd Street, Fort Lauderdale, FL 33334 (954) 630-9967 tel. (954) 630-0217 fax.

1 7-30-13 EM Corrections per Miami-Dade

DRAWING No.:

4500TTD001 R2

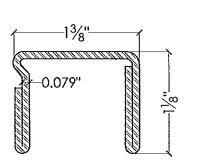
Sheet 5 of 6



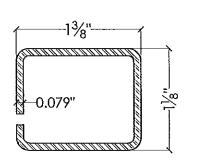
4500-Series Frame

4500-Series Sash

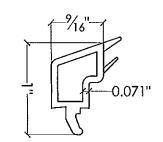
**COMPONENTS AND BILL OF MATERIALS** 



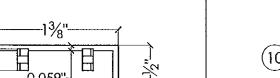
(3) 4500-Series Frame Reinforcement



4500-Series Sash Reinforcement



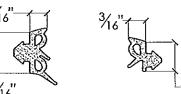
Glazing Stop



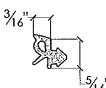
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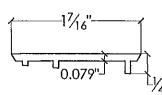
Plug Button



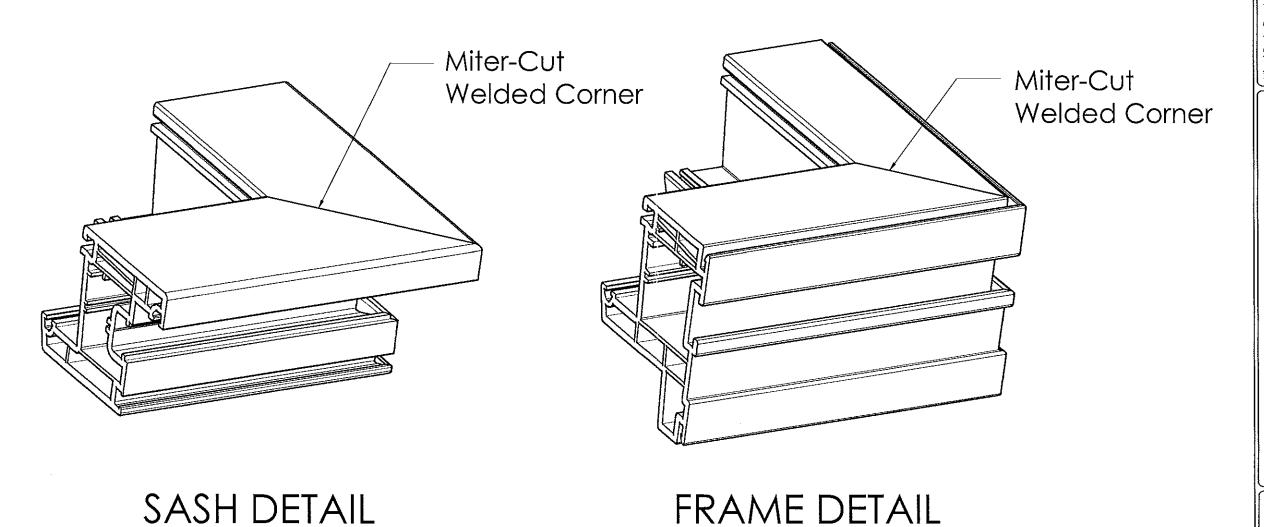
(11) Sealing Spline



(7) Glazing Spline



Shim Support



CATEGORY 5
Engineering Services, Inc. 5

**EUROTECH INDUSTRIES, INC.** 250 NE 32nd Street, Fort Lauderdale, FL 33334 (954) 630-9967 tel. (954) 630-0217 fax.

4500-SERIES TILT-TURN WINDOW Large Missile Impact Resistant

1 8-05-13 JT NO. DATE BY (

**DRAWING No.:** 

4500TTD001 R2

Sheet 6 of 6